

# The Role of Utility Rebate Programs in Performance Contracting

Jim Armstrong CPE CEM
Program Manager Technical
NSTAR Electric & Gas

### Challenge

The use of energy efficient products and operation of energy efficient buildings systems has a larger impact upon the environment than any other technology!



#### Objectives of Energy Efficiency Programs

Transform the market toward energy efficiency design and practice

- Easy participation for customers and market actors
   Educate customers and provide incentives to stimulate participation
  - Offer education and training initiatives
- Expand understanding of design options
   Improve overall standard practices design and installations

### Utility Rebates and common Q / A

#### Rebate dollars .....

- 1. Are funded by rate payers \$0.0025 per kWh
- 2. Only pay a portion of cost
- 3. Are from investor owned utilities regulated by DTE
- 4. Are paid after the job is complete
- 5. Are for cost effective electric savings
- 6. Are for cost effective natural gas savings
- 7. "Do Not" pay for fuel switching or DG

# **Utility Program Overview**



### 2005 C&I Programs

#### **NSTAR Electric Programs**

- ✓ Construction Solutions
  - ✓ Focus on Time-Dependent projects
- ✓ Business Solutions
  - ✓ Retrofit projects performed for the purpose of energy savings
- ✓ Small Business Solutions
  - ✓ Turn-Key retrofit projects for customers >100 kW

#### NGRID Electric Programs

- ✓ Design 2000plus+
  - ✓ Focus on Time-Dependent projects
- ✓ Energy Initiative
  - ✓ Retrofit projects performed for the purpose of energy savings
- ✓ Small Business Solutions
  - ✓ Turn-Key retrofit projects for customers >200 kW

Regional Market Transformation Initiatives

NSTAR - Keyspan Gas Programs

Gas Networks

**MOTORUP** 

**Custom Program** 

## **Program Applications**

#### Prescriptive applications reflect simple incentive levels

- Commercial and Industrial Lighting
- Variable Speed Drives
- LED Traffic Signals
- Motor & VFD combination application
- Vending Machine Miser application
- Energy Efficient Lighting: prescriptive applications by space type
- 30 to 300 tons HVAC prescriptive: addresses Evaporative Chillers
- High Performance lighting
- Many more

#### **Construction Solutions**

#### Tracks:

- Equipment replacement
- New Construction

#### **Financial Incentives:**

- Up to 90% incremental costs
- 100% cost for technical assistance engineering and commissioning service\*
- Cap: \$750,000/project

Technologies – lighting, HVAC, VSD's Motors, custom Examines project as an integrated system

- Must involve full design team early or schematic phase
- (architect, mechanical engineer, electrical engineer).
- Study and application must be completed prior to final construction documents

<sup>\*</sup>Subject to Utility pre approval and cost benefit analysis on electric savings

### Program Enhancements - NSTAR

#### Code-Plus Lighting

- ✓ Construction Solutions Program only
- Limited to a new structures or existing building undergoing major rehabilitation
- 20% better than MA. Energy Code requirements on a watts/sq.ft. basis
- Incentive \$/sq.ft.









#### **Business Solutions**

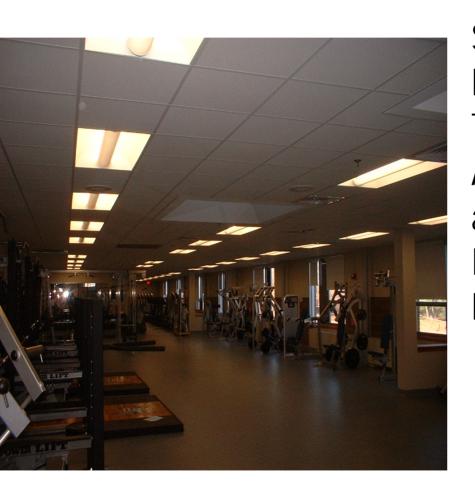
#### Financial incentives

- On average 40% 50% of total costs
- Cap: \$500,000/project
- Shared cost for technical assistance engineering and commissioning service\*

Technologies – lighting, controls, VSD's,motors, HVAC, building envelope measures, custom

\*Subject to NSTAR cost benefit analysis on electric savings

#### Barberi School - Framingham



Standard Lighting
Lamp & Ballast Retrofit using Super
T-8 Technology
Annual savings of 39,972 kWh or
approximately \$5,000
Rebate of \$42,030
Payback less than 2 years

#### **Small Business Solutions**

Turnkey retrofit services for facilities < 100 kW

- Identification, direct installation, and education of energy efficient alternatives
- Dedicated vendors that have been secured through a competitive bid process
   Financial Incentives
- 80% of total costs

Technologies – lighting, controls, HVAC tune-ups, and refrigeration/cooler controls

#### **Technical Assistance**

As part of its Energy Efficiency programs, NSTAR MECo & WMECo as well as Keyspan and NSTAR Gas provide technical assistance and other technical services. These services allow us to bring qualified technical consultants to a customer's facilities to help identify, evaluate, and present electrical energy conservation measures. The costs of these Engineering Services are typically equally shared between the utility and the customer.



### **Educational Tools/Training**

Energy Star Benchmarking Compressed Air Challenge HVAC Pilot for existing systems Other Training initiatives

(Check with your utilities)

# **Energy Star Benchmarking**

EPA-sponsored program that provides whole-building performance benchmarking services which allow customers the ability to set energy performance targets and plan energy efficiency improvements

- Available for free on-line at <u>www.energystar.gov</u>
- NSTAR to hired contractor to work with NSTAR customers to develop / scope energy star benchmarking case studies

### Gas Programs

- » Custom Program
  - Condensing Boilers/Furnaces
  - Direct Contact Water Heaters,
  - Combustion Controls
  - Engineering Study Funding

### Gas Programs

- » GASNETWORKS (statewide program)
  - •Small C&I High Efficiency Heating
  - •Small C&I High Efficiency Water Heating
  - •C&I Infrared Heating Equipment





### Summary/Next Steps

Require EE in your contract documents

Work with Procurement Dept and architects / consultants.

Take advantage of financial incentives (third party evaluation of measures)

Contact your Utility as soon as project knowledge becomes available

NGRID - 1-800-322-3223 or http://www. Masselectric.com Electric Programs for business

NSTAR - (781) 441-8592 or www.nstaronline.com Electric or Gas Programs for business

Keyspan - (732)584-0255 http://www.keyspanenergy.com Gas Energy Programs

Sign up for great training opportunities!

Utilize educational tools!



Questions? Thank you!

Contact us at: 781-441-8592 www.nstaronline.com